



FLEXGUARD TPO

(TPO) WATERPROOFING MEMBRANE

Thermoplastic polyolefin (TPO) waterproofing membrane is a new type of waterproof coil produced by a single extrusion process without any plasticizers, using polyolefin polymer synthetic resin and EPDM as the base material, with antioxidant test, anti-aging agent, UV absorbent and other fillers. It has both flexibility and weldability. Polyester fiber mesh cloth can be added as reinforcement material, made of enhanced waterproof material.

● PRODUCT STRUCTURE



- ← Polymer resin sheet Internally
- ← Reinforced fabrics
- ← Polymer resin sheet

● PRODUCT SPECIFICATION

| Thickness | Width/ft. | Length/ft. |
|-----------|-----------|------------|
| .45 | 5,6,10 | ≥50 |
| .60 | 5,6,10 | ≥50 |
| .80 | 5,6,10 | ≥50 |

● PRODUCT FEATURES

✓ Raw materials

Made of high quality polypropylene and rubber co polymerization, there are no plasticizers and other harmful substances in McGuire's Flexguard TPO



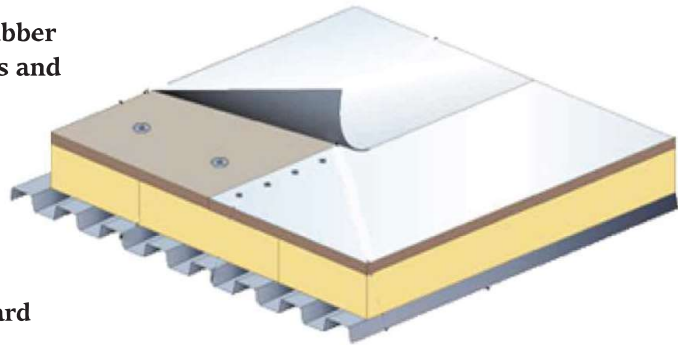
McGuire Flexguard TPO has excellent age resistance. It also maintains flexibility in -40c temperatures and does not become hard and brittle.

✓ Excellent Quality

The shrink rate of McGuire FlexGuard TPO is very low, the material is strong, highly impact resistant, puncture resistance and holds a long service life.

✓ Convenient Construction

Roofing Assembly is made simple with McGuire FlexGuard TPO, This product is easy to weld and efficient providing a strong seam connection. Seam peel strength is high, creating a sealed waterproof layer



✓ Product Type

Smooth (Category H),
Fiber fleece- backed (Category L),
Reinforced with polyester scrim (Category P)

✓ Application Scope

New and repaired single sheet metal roofing. Newly built and repaired single layer concrete roofing.



IMPLEMENTATION STANDARDS

| ITEM | | VALUE | | |
|--|---|--|-----|-----|
| | | H | L | P |
| Thickness of resin attaching to embedded scrim / mm \geq | | | | 0.4 |
| Tensile Property | Max tensile force / (N/cm) \geq | — | 200 | 250 |
| | Tensile strength / MPa \geq | 12.0 | — | — |
| | Elongation at break / % \geq | 500 | 250 | — |
| Dimensional Variation after heating / 100% \geq | | 20 | 1.0 | 0.5 |
| Low temperature flexibility | | -40°C no crack | | |
| Impermeability | | 0.3MPa 2h impermeable | | |
| Compression resistance | | 0.5kg. m no penetration | | |
| Tear strength of overlapping / (N/cm) \geq | | 4.0 | 3.0 | |
| Water absorption (70°C 168h) / % \geq | | 4.0 | | |
| Heat aging (80°C) | Time duration | 672h | | |
| | Appearance | No bubble, crack, delamination, or pinhole | | |
| | Retention rate of max tensile force / % \geq | — | 90 | 90 |
| | Retention rate of tensile strength / % \geq | 90 | — | — |
| | Retention rate of elongation at break/ % \geq | 90 | 90 | — |
| | Low temperature flexibility | -40°C no crack | | |
| Chemical resistance | Appearance | No bubble, crack, delamination, or pinhole | | |
| | Retention rate of max tensile force / % \geq | — | 90 | 90 |
| | Retention rate of tensile strength / % \geq | 90 | — | — |
| | Retention rate of elongation at break/ % \geq | 90 | 90 | — |
| | Low temperature flexibility | -40°C no | | |
| Artificial Weathering | Time duration | crack 1500h | | |
| | Appearance | No bubble, crack, delamination, or pinhole | | |
| | Retention rate of max tensile force / % \geq | — | 90 | 90 |
| | Retention rate of tensile strength / % \geq | 90 | — | — |
| | Retention rate of elongation at break/ % \geq | 90 | 90 | — |
| | Low temperature flexibility | -40°C no crack | | |

